

00001
1 UNITED STATES DISTRICT COURT

2 SOUTHERN DISTRICT OF OHIO

3 WESTERN DIVISION

4 - - -

5 MARY PISKURA AND CHARLES :

6 PISKURA, :

7 PLAINTIFFS, :

8 -VS- :CASE NO. 1:2010CV00248

9 TASER INTERNATIONAL, INC., :

10 CITY OF OXFORD, OXFORD :

11 POLICE DEPARTMENT, STEPHAN :

12 D. SCHWEIN, GEOFF ROBINSON, :

13 JOHN DOES I-V, JOHN DOES :

14 VI-X, :

15 DEFENDANTS. :

16 - - -

17 Deposition of OBINNA RAPHAEL UGWU, MD, a

18 witness herein, taken by the plaintiffs as upon

19 cross-examination pursuant to the Federal Rules of

20 Civil Procedure and pursuant to Subpoena duly

21 issued and served and stipulations hereinafter set

22 forth at the Oxford Seniors Center, 922 Tollgate,

23 Oxford, Ohio, at 9:32 a.m. on Wednesday, December

24 1, 2010, before Lisa M. Conley Yungblut, RMR, CRR,

25 CCP, a notary public within and for the State of



00005

1 THE VIDEOGRAPHER: Today is

2 December the 1st, 2010, the time now is 9:32.

3 This is the matter of Piskura versus TASER

4 International, et al. It is Case No.

5 1:2010:CV00248. This is in the United States

6 District Court, Southern Division of Ohio. We're

7 at the Oxford Senior Citizens at 922 Tollgate,

8 Oxford, Ohio. Today's court reporter is Lisa

9 Conley. I am Marlene Dori, videographer. We're

10 with Spangler Reporting.

11 And, Counsel, at this time will you

12 introduce yourself and who you represent.

13 MR. WILLIAMSON: Good morning,

14 Peter Williamson appearing on

15 Piskura family, the Plaintiffs.

16 MR. LANDES: I'm

17 the City of Oxford, Defendants.

18 MR. BRAVE: Michael

19 Defendant, TASER International, Incorporated

20 THE VIDEOGRAPHER: Thank you. At

21 this time the court reporter will swear the

22 witness in, please.

23 (Witness sworn.)

24 THE VIDEOGRAPHER: This is the

25 beginning of Tape No. 1, you my begin.

00009

1 pathology residency program at Metro Health
2 Medical Center, which is a campus of the Case
3 Western University in Cleveland, Ohio. I spent
4 four years in the general pathology program during
5 which course I also sat and passed the Step 3 of
6 the United States Medical Licensing Examination,
7 which is a requirement for licensing in most
8 states in the country.

9 I then proceeded to the Tarrant
10 County Medical Examiner's Office, this is located
11 in Fort Worth, Texas, where I underwent a one-year
12 fellow training in forensic pathology. Following
13 that successful completion of my forensic
14 pathology training, I was offered a position at
15 the Hamilton County Corner's Office in Cincinnati,
16 Ohio, of which I started in August of 2005. I
17 worked there up until February of 2009, when I
18 also was offered a position at Franklin County
19 Corner's Office in Columbus, Ohio, and I've been
20 working in Franklin County since March of last
21 year.

22 Q. Doctor, are you board certified in
23 any subspecialty in medicine?

24 A. No, sir.

25 Q. In terms of your experience as a

00017

1 recollection of this particular case? In other
2 words, did this case stand out to you in any
3 particular way?

4 A. Yeah, it did stand out.

5 Q. And why was that?

6 A. Well, this was the first case I had
7 participated in that involved an electrical
8 conductive device.

9 Q. Okay.

10 A. Secondly, I believe I consulted
11 widely with my colleagues before arriving at an
12 opinion.

13 Q. Okay. I'm going to get to that in a
14 minute. But up to this point, you had not seen
15 any other case involving the use of a TASER
16 electronic control device, correct?

17 A. I hadn't directly been involved in
18 in any other case. I mean, I hadn't independently
19 been a pathologist in any other case before like
20 this.

21 Q. Okay. Let me understand what you're
22 referring to. Had you either been consulted or
23 had you associated with any other pathologist with
24 respect to a case in which there was a death
25 associated with an electronic control device?

00018

1 A. Yes.

2 Q. And tell me what the -- First of
3 all, how many times prior to this incident had
4 that happened?

5 A. I believe during my training as a
6 fellow in forensic pathology in Fort Worth, Texas,
7 we had a case that involved a similar device. And
8 while in Hamilton County, a case also involving an
9 electrical conductive device was -- came up that
10 one of my colleagues handled, and out of respect
11 of our usual collegial relationship, we do consult
12 opinions from each other in such circumstances.

13 Q. Okay. Let's talk about the case
14 first in Tarrant County. Explain to us what your
15 involvement in that case was.

16 A. I was involved as a student. The
17 attending, attending pathologist, was the one
18 primarily handling the case. It was just a
19 learning experience for me.

20 Q. Okay. And can you tell us -- And I
21 gather it was quite sometime ago. But do you
22 remember any of the circumstances involving that
23 case in Tarrant County in which there was a
24 discharge of an electronic control device?

25 A. This has been awhile. I really

00023

1 A. I believe this was either in 2005 or
2 2006.

3 Q. What was your involvement in this
4 second case in Hamilton County, if you can recall?

5 A. I believe -- You know, sometimes
6 when we do get cases that seem a little bit out of
7 the norm, we sit together as a group, all of the
8 pathologists will sit together and discuss such
9 cases, and I believe this was one of the cases

10 that we did discuss.

11 Q. Again, can you tell me, if you can
12 recall, what the circumstances were of that
13 particular death?

14 A. I honestly don't remember the
15 circumstances regarding this case.

16 Q. Okay. Do you recall the substance
17 of the conversation or dialogue you had with your
18 fellow pathologists as you met to discuss that
19 case?

20 A. I believe the point of contention
21 was whether the electronic conductive device was
22 directly responsible for death or if this could be
23 attributed to excited delirium. Similar to the
24 previous case, this individual also had certain
25 toxins in his body.

00062

1 A. Yes, sir.

2 Q. Okay. And you've earlier testified

3 that this gentleman was 70 inches in length,

4 correct?

5 A. Yes, sir.

6 Q. Okay. So we're talking about, if we

7 were to reverse the measurement and in other

8 words, measure from the top of the head, it would

9 be 9 inches from the top of the head; is that

10 right?

11 A. Yes, sir.

12 Q. Okay. Now, can you demonstrate for

13 us, if you can recall, where you found the first

14 TASER ECD probe mark?

15 A. (Indicating.) Well, using my body,

16 this would be -- I said it was slightly to the

17 right of the incision. The incision is right

18 here, and I did indicate it was -- how many

19 inches, about half, about half an inch to the

20 right, so slightly, a little bit to the right, and

21 I would expect it to be slightly, maybe slightly

22 lower than the collar bone, just a little bit to

23 the right.

24 Q. Okay. And then did you find a

25 second mark?

00063

1 A. No, sir.

2 Q. Okay. I'm sorry. Could you
3 continue with your external examination.

4 Well, I'm sorry. Let me ask you,
5 was there any doubt in your mind at the time you
6 did this autopsy that that mark that you found
7 that you have just described was from a TASER ECD
8 probe?

9 A. I mean, other things could cause
10 denaturing of the skin, but given the
11 circumstances -- A lot of times when we make
12 conclusions it's based on the history, obviously.
13 But my belief was that that mark was consistent
14 with a TASER application.

15 Q. Okay. I'm sorry, I keep
16 interrupting you. Go ahead. Can you continue
17 with your external examination.

18 A. That essentially was it. There was
19 what appeared to be needle marks on both, both
20 extremities on both arms.

21 Q. And did those -- Were those
22 consistent with medical intervention, in your
23 opinion?

24 A. Yes, they were consistent with
25 recent needle insertions, and since he had been in

00088

1 A. It was Dr. Stephens, Dr. Kenny.

2 Q. How do you spell that name?

3 A. K E N N Y.

4 Q. Thank you.

5 A. And I think that Dr. Erhardt had
6 left by this time. I think the other pathologist
7 was Dr. -- I can't recall her name either. I
8 can't recall her name right now either.

9 Q. Okay. But it was a female
10 pathologist?

11 A. Yeah, I believe it was a female
12 pathologist. This was -- Okay. This happened in
13 2008. I left the coroner's office in 2009. Yeah,
14 it was a female pathologist.

15 Q. Okay. So those were the three
16 others besides yourself?

17 A. Yes.

18 Q. Okay.

19 A. In addition to the withstanding
20 consultant in neuro and cardiac pathology.

21 Q. The resident in neuro and cardiac
22 pathology is the same person you mentioned a
23 minute or so ago whose name --

24 A. No, no, he's not a resident. He's
25 a consultant.

00089

1 Q. I'm sorry. But that's one person?

2 A. Yes, sir.

3 Q. And he also came to the conclusion

4 that there was no, no apparent or specific

5 abnormality in Mr. Piskura's heart?

6 A. That's what he relayed to me, sir.

7 Q. Okay. Did the other pathologists in

8 your practice group at the time in Hamilton County

9 also examine or look at the microscopic tissue

10 that was taken from the heart?

11 A. Yes, sir. When I said they

12 "examined" the heart, they did not physically look

13 at the gross heart. They looked at the

14 microscopic sections and they looked at the

15 pictures.

16 Q. Okay. I'm glad you explained that.

17 Thank you.

18 Okay. Now, what was the next part

19 of your internal examination of the body?

20 A. Excuse me?

21 Q. What was the next part of your

22 internal examination of the body?

23 A. Essentially, that was the entire

24 examination I did, sir.

25 Q. I notice in your report that you

00101

1 Q. Doctor, have you ever received any
2 training prior to the Piskura death with respect
3 to electronic control devices?

4 A. No, sir.

5 Q. Had you reviewed any peer-reviewed
6 studies or literature in connection with the
7 effects that might or might not be caused by TASER
8 electronic control devices?

9 A. Yes.

10 Q. What had you reviewed?

11 A. Well, I reviewed some -- I reviewed
12 textbooks, that includes the textbook written by
13 DiMaio, the DiMaio brothers. There was several
14 articles I reviewed in the process of evaluating
15 this case. I don't, specifically don't remember
16 these articles, and I think -- No, I don't
17 remember the specific authors of the articles, but
18 I know some of them were from emergency room
19 physicians. I know some of them were studies
20 based on -- that were supported by TASER
21 International.

22 I believe some of them were based on
23 police working in Canada, it was a large
24 introspective study based out of Canada. I
25 believe there was a similar very large

00103

1 you know, sometimes causes devices to lead to

2 cardiac arrhythmias.

3 Q. Okay. So your understanding from

4 Dr. Lakriddy's study was that one of the factors

5 that would weigh into whether an arrhythmia might

6 be caused by an electronic control device would be

7 the proximity of the probes to the heart, correct?

8 A. Yes, sir.

9 Q. And in this particular case, did you

10 find that the probe, at least the one probe mark

11 that you identified, was in close proximity to the

12 heart?

13 MR. BRAVE: Objection, form.

14 A. Well, I thought it was in the

15 precordial area, it was in the general area of the

16 of where the heart ought to be.

17 Q. And at least from your examination

18 of the body, you could not determine if a second

19 probe struck Mr. Piskura; is that correct?

20 MR. LANDES: Objection.

21 A. Yes, I could not, I could not

22 specifically identify the site of a second probe.

23 Q. How familiar back in April of 2008

24 were you with the operation of a TASER electronic

25 control device?

00124

1 proximity to the TASER ECD discharge, correct?

2 MR. BRAVE: Objection to form.

3 A. Yes, sir.

4 Q. Now, ultimately, what were your

5 opinions in this case as to cause of death?

6 A. Well, I -- This was a very, very
7 difficult case to come to a conclusion. The way I
8 looked at it eventually was that this is a young
9 man, to the best of my knowledge and based on the
10 extensive investigation of his medical records, he
11 appeared to be very healthy. He had been drinking
12 and had apparently drunk a lot more than he ought
13 to be drinking, and here he is involved in this
14 altercation, and there's this application of the
15 electronic conductive device, which some have
16 argued could cause an arrhythmia.

17 And I know there's also an
18 overwhelming number of people that argue the
19 opposing, that it could not possibly cause an
20 arrhythmia, but I couldn't in good conscious
21 separate these circumstances from his death. I
22 believe the temporal relationship was too close to
23 be just a coincidence. And in my opinion, both
24 the alcohol intoxication, the application of the
25 electrical conductive device, and the brief

00125

1 physical exertion all contributed to his sudden
2 cardiac arrest, which eventually led to anoxic
3 encephalopathy and other failures that caused his
4 death.

5 Q. To your knowledge, Doctor, is there
6 any scientific way to quantify the percentage that
7 you attribute to the alcohol versus the percentage
8 you attribute to the electronic control device?

9 A. I'm not aware of any scientific way
10 of quantifying that, sir.

11 Q. As you sit here today as a forensic
12 pathologist, do you have an opinion to a
13 reasonable degree of medical certainty as to what
14 percentage of Mr. -- the cause of Mr. Piskura's
15 death is attributable to the alcohol as opposed to
16 that percentage attributable to the electronic
17 control device?

18 A. No, sir.

19 MR. WILLIAMSON: Okay. I have
20 nothing further. Thank you. I appreciate you
21 coming down on this difficult stormy day, Doctor.

22 THE WITNESS: Thank you, sir.

23 CROSS-EXAMINATION

24 BY MR. BRAVE:

25 Q. Doctor, I still need to know by what

00126

1 mechanism are you opining to a reasonable degree

2 of medical or scientific certainty or probability

3 the application of an electronic control device

4 contributed to Mr. Piskura's death?

5 A. Well, I believe based on literature

6 review, certain research that have been conducted

7 by others, that there is a possibility of an

8 electronic conductive device inducing an

9 arrhythmia directly through the electrical current

10 into the heart.

11 Q. So just so I get this clear, as you

12 sit here today, you are opining to a reasonable

13 degree of medical or scientific certainty or

14 probability if an electronic control device is

15 used on Mr. Piskura directly caused a cardiac

16 dysrhythmia?

17 A. No. I am opining that I cannot rule

18 it out as a cause of his arrhythmia.

19 Q. So, therefore, it is a possibility

20 to a reasonable degree of medical and scientific

21 certainty, correct?

22 A. Yes, sir.

23 Q. Lucky for all of us, I have

24 highlighted my notes trying to avoid duplicating

25 anything that Mr. Williamson has already asked

00130

1 We're on stand-by. Let me make an announcement.

2 (Off-the-record discussion.)

3 THE VIDEOGRAPHER: You may begin.

4 MR. BRAVE: Just to clarify for the

5 record, the power went out very briefly, maybe 3

6 to 5 seconds, and it came back on. The camera

7 went down. It is now back on and there were no

8 questions or answers during the power outage.

9 Everybody agree?

10 MR. LANDES: Yes.

11 MR. WILLIAMSON: Yes.

12 BY MR. BRAVE:

13 Q. And you were unable to locate any

14 mark or penetration by a second TASER probe,

15 correct?

16 A. Yes, sir.

17 Q. And did you look carefully for it?

18 A. Yes, sir.

19 Q. Did you look extensively for it?

20 A. Yes, sir, I did.

21 Q. Do you believe that, if there had

22 been any kind of mark or penetration by a second

23 TASER probe, you would have located it?

24 MR. WILLIAMSON: Object as to form.

25 A. It could be there and I did not

00131

1 notice it; and, you know, it's also possible it

2 wasn't there and that's why I didn't notice it.

3 Q. Are you an expert in TASER's probe

4 signature marks?

5 A. Definitely not, sir.

6 Q. As far as your review of the records

7 in this case, regarding the toxicology report,

8 when the blood was taken from Mr. Piskura, do you

9 believe that the blood was circulating within his

10 body when it was taken?

11 A. Yes, sir.

12 MR. WILLIAMSON: Object as to form.

13 Q. Sorry, repeat the answer, please.

14 A. Yes, sir.

15 Q. You mentioned several studies that

16 you looked at. Let's go over a couple of those.

17 Did you look at any human study that found that a

18 TASER electronic control device caused cardiac

19 dysthymias?

20 A. No, sir.

21 Q. Are you an expert in electrical

22 stimulation or shielding of the human heart?

23 A. No, sir.

24 Q. Are you an expert in the anatomical

25 features and factors differentiating a porcine

00132

1 model heart from a human heart?

2 MR. WILLIAMSON: Objection as to
3 heart.

4 A. Am I an expert in the differences
5 between a human heart and a porcine heart?

6 Q. Yes.

7 A. No, I'm not an expert in that.

8 Q. Can you tell me the difference in
9 the purkinje systems, P U R K I N J E, between a
10 human heart and a swine heart?

11 MR. WILLIAMSON: Objection, lacks
12 foundation, form.

13 A. My training is not on porcine heart.
14 I don't know the circulation of the porcine heart.

15 Q. Well, maybe I misunderstood. I
16 understood your testimony regarding the Lakridy
17 article and possibly others, including the Dennis
18 and Walter articles, that that is how you arrived
19 at your opinion that a TASER could cause a cardiac
20 dysrhythmia; is that correct?

21 A. Yes, sir.

22 Q. Aren't those all porcine studies?

23 A. I believe they're all porcine
24 studies, sir.

25 Q. You stated also that the electronic

00143

1 A. Based on this, this record
2 indicates -- From my recollection, the EMS
3 arrived, like I said, maybe I think about 5 to 7
4 or 8 minutes, and based on this, the police opined
5 that he was still breathing up until that time.
6 So he was still breathing for up to 5, 7, 8
7 minutes.

8 Q. And you're saying to a reasonable
9 degree of professional certainty that that's
10 consistent with the TASER device causing a direct
11 cardiac arrest of Mr. Piskura?

12 A. That would not be inconsistent. And
13 let's remember here that I am not claiming to be
14 an expert in the effects of a TASER device. What
15 I'm trying to describe is what would happen in a
16 case of a cardiac -- a sudden cardiac arrest.

17 People can still respire, people can still breathe
18 in and out, even when their heart has stopped
19 beating.

20 Q. Are you an expert in electricity?

21 A. No, sir.

22 Q. Are you an expert in types of
23 electricity?

24 A. No, sir.

25 Q. What is the difference between

00144

1 stored and delivered electrical charge?

2 A. Stored and delivered electrical

3 charge? Well, looks to me like stored electrical

4 charges start and deliver the electrical charges

5 what has been discharged from the storage. I

6 imagine we're talking of from the same device.

7 Q. Are you an expert in the scientific

8 principles of electricity?

9 A. I have a basic understanding of the

10 scientific principles of electricity.

11 Q. Do you consider yourself an expert

12 in the scientific principles of electricity?

13 A. No, sir.

14 Q. Are you an electrical engineer?

15 A. No, sir.

16 Q. Are you an expert in electrical

17 biomechanics?

18 A. No, sir.

19 Q. Are you an expert in finite element

20 modeling of electrical current?

21 A. No, sir.

22 Q. Are you an expert in the flow of

23 electrical current from an electronic weapon into

24 the human body?

25 A. No, sir.

00145

1 Q. Are you an expert in the flow of
2 electrical current from an electronic weapon
3 within the human body?

4 A. No, sir.

5 Q. What is the International System of
6 Units?

7 A. For what?

8 MR. WILLIAMSON: Object as to form.

9 Q. Go ahead.

10 A. For what?

11 Q. What is the International System of
12 Units?

13 A. For what, International System of
14 Units for what?

15 Q. I haven't gone into a specific unit
16 yet.

17 A. Oh, International System of Units,
18 it's an internationally recognized standard or
19 unit of measurement that specifies a particular
20 unit of measurement. It could be weight, it could
21 be force, it could be energy, just an agreed-upon
22 international standard.

23 Q. As you sit here today, can you state
24 to a reasonable degree of certainty that any TASER
25 probe on Mr. Piskura impacted anywhere on the left

00146

1 side of his body?

2 A. To the best of my knowledge, no.

3 Q. Did any TASER probe hit his left

4 chest?

5 A. To the best of my knowledge, based

6 on my examination, no.

7 Q. What is a joule, J O U L E?

8 MR. WILLIAMSON: Objection as to

9 form.

10 A. A joule is a unit of energy,

11 electricity.

12 Q. How many joules does a TASER

13 electronic control device deliver to the human

14 body per pulse?

15 MR. WILLIAMSON: Objection as to

16 form.

17 A. I think it depends on the type of

18 electronic conductive device.

19 Q. Well, what model electronic control

20 device was used on Mr. Piskura?

21 A. I believe it was the X26.

22 Q. All right. What is the delivered

23 joules from an X26 to a human body?

24 MR. WILLIAMSON: Objection as to

25 form.

00150

1 exact definition. It's been a lot of years since
2 I last studied these things, and like I already
3 stated, I'm by no means an expert in electricity.

4 Q. Do you consider yourself an expert
5 in electronic control devices?

6 A. Again, like I previously stated, no.

7 Q. Is association the same as
8 causation?

9 A. No, sir.

10 Q. Is correlation the same as
11 causation?

12 A. No, sir.

13 Q. As you sit here today, tell me any
14 human studies that have found that a TASER device
15 delivered to a human being causes cardiac
16 dysrhythmias.

17 MR. WILLIAMSON: Objection, asked
18 and answered.

19 A. Should I go ahead?

20 Q. You can answer.

21 A. I don't, I don't recall as I'm
22 sitting here right now.

23 Q. As you sit here today, tell me any
24 study, human or otherwise, that has determined
25 that a TASER cardiac device delivered to a human

00151

1 causes cardiac dysrhythmias.

2 A. Yes, I did mention that there were
3 some articles that I come across that seemed
4 convincing, and that like I said earlier, I don't
5 particularly remember the names of the authors of
6 those articles, but if you do require me to pull
7 them up, I would when I've got some time.

8 Q. Listen carefully to my question.

9 I'm asking for any study, animal or human,
10 including those reviewed, that have found that a
11 TASER device as delivered to a human causes
12 cardiac dysrhythmias?

13 MR. WILLIAMSON: Question is asked
14 and answered, that's the third time.

15 A. Like I said, I don't have a complete
16 recollection of the authors of articles I've read
17 that have indicated that. But my understanding
18 and based on what I've looked at, yes, there are
19 theoretically possibilities of delivered
20 electronic conducting device causing cardiac
21 arrhythmias in humans.

22 Q. So it's only theoretical, it is not
23 proven to be causal in humans; is that correct?

24 MR. WILLIAMSON: Object.

25 A. To the best of my knowledge, I don't

00152

1 know that. I mean, I wouldn't expect such an
2 experiment to be conducted on a live human being,
3 so I wouldn't expect anybody to try to prove it.

4 Q. Tell me any study, animal, human or
5 otherwise, where a TASER X26 directly applied to a
6 human or an animal directly caused cardiac
7 dysrhythmia.

8 A. Actually, I think that there are at
9 least two studies that have documented that. The
10 fact that, as I said earlier, I cannot recall the
11 authors of those studies does not invalidate them.
12 If you want me to get the authors of those
13 articles later, I will be more than willing to do
14 that.

15 Q. Was there any kind of an infusion of
16 any kind of catecholamines to Mr. Piskura prior to
17 the application of electronic control device?

18 MR. WILLIAMSON: Objection as to
19 form.

20 A. Not that I know of.

21 Q. Then please tell me any study that
22 ever existed that finds that a TASER X26 as
23 delivered to a human being for less than 30
24 seconds in duration has resulted in causing a
25 cardiac dysrhythmia where there was not previously

00153

1 an infusion of catecholamines?

2 A. I don't know of any at this point.

3 Q. What authoritative sources did you
4 review to determine the lethal concentrations
5 versus toxic concentrations of alcohol in this
6 case?

7 A. I reviewed, I know I reviewed
8 Basalt, it's a textbook of toxicology that is
9 commonly used by forensic pathologists.

10 Q. Any others?

11 A. I've also reviewed the book by
12 DiMaio.

13 Q. Any others?

14 A. What is it called? Those are the
15 ones I can recall as of at this point.

16 Q. Are you familiar with the "Poisoning
17 and Toxicology Handbook," Fourth Edition, by
18 Leikin, L E I K I N, and Paloucek, P A L O U C E
19 K?

20 A. No, I can't say that I am.

21 Q. Are you familiar with the "Handbook
22 of Forensic Toxicology For Medical Examiners" by
23 Molina, M O L I N A?

24 A. No, sir.

25 Q. According to your understanding of

00154

1 the published peer-reviewed literature, at what
2 point does alcohol become potentially lethal in a
3 human being?

4 A. Well, like I said, it's not a matter
5 of at one point or not. It's -- It has to be
6 tailored to the individual and the circumstances
7 under consideration. The levels vary widely.
8 What is fatal in one person might not be fatal in
9 another person.

10 Q. According to the peer-reviewed
11 literature, at what point is it stated that
12 alcohol is potentially lethal?

13 A. According to peer-reviewed
14 literature, what I do recall is it's levels of .4
15 and above, .40 gram percent and above.

16 Q. So there's nothing out there that
17 you're aware of that's less than .4 percent?

18 A. Oh, certainly there are documented
19 that it's less than that.

20 Q. And how low do those go?

21 MR. WILLIAMSON: Objection as to
22 form.

23 A. I've seen -- You know, the
24 literatures that I have reviewed give a range
25 starting anywhere from .24, .28, some mimeographs

00155

1 have specified .36 and above. So what I'm giving
2 is just about an average, it's a range.

3 Q. And Mr. Piskura's blood alcohol

4 level was .32, correct?

5 MR. WILLIAMSON: Objection as to
6 form.

7 A. .319, yeah, .32 if you approximate.

8 Q. Well, the only reason I did that is
9 you gave me .24, .28 and .36. You didn't take it
10 out to three decimals when you gave it to me. And
11 if you take .319, that rounds off to what?

12 A. Okay, yeah, .32.

13 MR. BRAVE: Take a break for 5
14 minutes.

15 THE VIDEOGRAPHER: One second,
16 please. We're going off the record. One second,
17 please. We're off the record.

18 (Brief recess.)

19 THE VIDEOGRAPHER: Continuation of
20 Tape No. 2, you're back on the record. You may
21 begin.

22 BY MR. BRAVE:

23 Q. Doctor, switching gears to your
24 expert report, did you mention lymphocytes in your
25 expert report?